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PRE-APPEAL BRIEF REQUEST FOR REVI		SSS-10	9
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] May 1, 2006	Application Number Filed 10/717,019 November 19, 200		
on Signature / Chilada Chur	First Named Inventor Patrick C. St. Germain		
	Art Unit		Examiner
Typed or printed name	3654		Scott J. Haugland
The review is requested for the reason(s) stated on the attac Note: No more than five (5) pages may be provided.	hed sheet(s).	
I am the applicant/inventor. assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		<u>ivaldis Ce</u>	Signature puritis or printed name
applicant/inventor. assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.	\ <u></u>	ivaldis Ce Typed 2) 580-118	puritis or printed name
applicant/inventor. assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96) attorney or agent of record. 20,818	(31	ivaldis Ce Typed 2) 580-118	puritis or printed name

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*Total of .

forms are submitted.

Scott J. Haugland

Applicant(s):	Patrick C. St. Germain et al.)
Application No.	10/717,019))
Filed:	November 19, 2003) Group Art Unit: 3654
For:	WEB TENSIONING DEVICE WITH PLURAL CONTROL INPUTS)))
Examiner:	Scott J. Haugland) Attorney Docket No. SSS-109

REQUEST FOR REVIEW

) Attorney Docket No. SSS-109

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

All claims stand rejected under 35 U.S.C. 103(a) as unpatentable over U.S. Patent No. 6,547,707 to Cote in view of U.S. Patent No. 5,659,229 to Rajala. This rejection is not warranted for the following reasons.

- 1. The Examiner recognizes that U.S. Patent No. 6,547,707 to Cote does not disclose that the torque applied by the servo motor is substantially the same as the force of the dancer arm acceleration, or that it is increased or reduced by this force, yet erroneously contends that this deficiency is remedied by the newly cited Rajala reference.
- 2. Cote does not teach or describe an angular sensor "used to determine the position of the dancer roll" as contended by the Examiner. Instead, the dancer roll in Cote is positioned as required to maintain a predetermined tension in the web based on the caliper of the web material. (Col. 1, lines 54-58).
- 3. The Examiner's interpretation of the teachings of the newly-cited U.S. Patent No. 5,659,229 to Rajala is incorrect. Rajala does not teach control of a dancer roll so as to compensate for the effects of acceleration of the dancer roll by detecting the magnitude

of the acceleration and applying a torque to the dancer arm. Instead, Rajala monitors web tension incrementally (Col. 3, lines 1-2; col. 5, lines 41-57), as well as dancer position vertically (FIG. 2; col. 7, lines 40-49), dancer roll translation velocity (col. 8, lines 51-54), and web velocity (col. 8, lines 60-65). The Rajala disclosure contains no suggestion whatsoever to measure the <u>acceleration</u> of a <u>pivotably mounted</u> dancer arm, or any means for doing so.

- 4. Replacement of the piston/cylinder assembly of Cote (Col. 3, lines 38-43)n with any of the complex web tension sensors described by Rajala, would have resulted in an inoperable device. The dancer 24 of Rajala moves up and down only vertically as can be readily seen in FIG. 2. The dancer 11 of Cote pivots in response to the piston/cylinder assembly 17 shown in FIG. 1.
- 5. Neither Cote nor Rajala shows or suggests means for the detection of the <u>acceleration</u> of the dancer arm and the application of a compensating torque component therefor.
- 6. Claim 11 calls for a particular type of encoder, to wit, one that senses relative angular displacement of the dancer arm. Neither Cote nor Rajala show or suggest such an encoder.
- 7. In Rajala there is no angular displacement of the dancer (see FIG. 2). There is no basis in the record for the unsupported assertion that "any position sensor or including that taught by Rajala is seen to be an encoder." There is no evidence of record that one of ordinary skill would see it that way.
- 8. Claim 13 calls for a servo motor that is an electric motor. Cote at Col. 3, line 33 only mentions an electric spindle drive.
- 9. Claim 14 depends on claim 13 and calls for an electric servo motor which is a limited angle electric motor operably associated with the dancer arm for pivoting the dancer

arm by the application of torque in response to the control output signal that is generated in response to the acceleration of the dancer arm. The prior art neither shows nor suggests such an apparatus. The Examiner's unsupported testimony as to what would have been obvious cannot support the rejection of claim 14.

- 10. Claim 12 is dependent on Claim 11 and specifies that the angular position sensor is an incremental rotary optical encoder and is improperly rejected under 35 U.S.C. 103(a) based on Cote in view of Rajala and U.S. Patent No. 6,024,319 to Kawabata, et al.
- (a) Kawabata, et al., is not combinable with Cote because Cote adjusts web tension by positioning the arm 14 pneumatically, whereas Kawabata, et al., teach tension adjustment by repositioning the rotational centers of the guide rollers and the dancer rollers relative to one another so as to change the force components due to gravity. An entirely different tensioning mechanism is involved.
- (b) Cote does not disclose any type of angular position sensor, much less an incremental rotary optical encoder.
- (c) Any replacement or substitution of the pressure transducer 19 of Cote with an incremental rotary optical encoder would have resulted in an inoperable device.
- (d) Kawabata, *et al.*, does not teach the use of an incremental rotary optical encoder. Kawabata, *et al.*, only teach the use of a <u>distance sensor</u>, not an optical sensor, for its system. See for example, col. 4, lines 11-18.

11. Cote, Rajala, and Kawabata, et al., all show devices that monitor web tension and rely on a tension determination for adjustment. In contradistinction, the present web tensioning device does not monitor web tension, but instead, maintains a predetermined web tension by detecting acceleration of a dancer arm that engages the web. This is clearly an unobvious departure from the web tensioning devices of the prior art.

Respectfully submitted,

May 1, 2006

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